

CLAIMS:

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all
1. A system comprising:
an interface of a target application, the interface comprising a plurality of operations
to be selected by a user;
a monitoring unit configured to monitor data of selecting of the plurality of operations
of the interface by the user, and to generate a log of the monitored data, the log of the
monitored data being in a form of a map mapping key data to respective value data;
a communicating unit configured to receive an object derived from the abstract class
10 including the log of the monitored data, and to communicate the log of the monitored data.
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- 15 2. A system according to Claim 1, wherein the target application is a software
application and the interface is a display screen of the software application.
3. A system according to Claim 1, wherein the target application is an image forming
device and the interface is an operation panel of the image forming device.
- 20 4. A system according to Claim 1, wherein the target application is an appliance and
the interface is an operation panel of the appliance.
5. A system according to Claim 1, wherein the communicating unit sends the log of
the monitored data when the user exits the target application.
- 25 6. A system according to Claim 1, further comprising a setting unit configured to set
a number of sessions of the target application to be executed by the user prior to the
communicating unit communicating the log of the monitored data.
- 30 7. A system according to Claim 1, wherein the key data and the value data in the map
both contain string data.

8. A system according to Claim 7, wherein the value data includes vectors which contain string data.

9. A system according to any one of Claims 1-8, wherein the communicating unit communicates the log of the monitored data by Internet mail.

10. A system comprising:
interface means of a target application means, the interface means for providing a plurality of operations to be selected by a user;
monitoring means for monitoring data of selecting of the plurality of operations of the interface means by the user, and for generating a log of the monitored data, the log of the monitored data being in a form of a map mapping key data to respective value data;
communicating means for receiving an object derived from the abstract class including the log of the monitored data, and for communicating the log of the monitored data.

11. A system according to Claim 10, wherein the target application means is a software application and the interface means is a display screen of the software application.

12. A system according to Claim 10, wherein the target application means is an image forming device and the interface means is an operation panel of the image forming device.

13. A system according to Claim 10, wherein the target application means is an appliance and the interface means is an operation panel of the appliance.

14. A system according to Claim 10, wherein the communicating means sends the log of the monitored data when the user exits the target application means.

15. A system according to Claim 10, further comprising a setting means for setting a number of sessions of the target application means to be executed by the user prior to the

communicating means communicating the log of the monitored data.

16. A system according to Claim 10, wherein the key data and the value data in the map both contain string data.

17. A system according to Claim 16, wherein the value data includes vectors which contain string data.

18. A system according to any one of Claims 10-17, wherein the communicating means communicates the log of the monitored data by Internet mail.

19. A method of monitoring usage of an interface of a target application, the interface including a plurality of operations to be selected by a user, comprising the steps of:
monitoring data of selecting of the plurality of operations of the interface by the user;
generating a log of the monitored data, the log of the monitored data being in a form of a map mapping key data to respective value data; and
receiving an object derived from the abstract class including the log of the monitored data, and communicating the log of the monitored data.

20. A method according to Claim 19, wherein the target application is a software application and the interface is a display screen of the software application.

21. A method according to Claim 19, wherein the target application is an image forming device and the interface is an operation panel of the image forming device.

22. A method according to Claim 19, wherein the target application is an appliance and the interface is an operation panel of the appliance.

23. A method according to Claim 19, wherein the communicating step sends the log of the monitored data when the user exits the target application.

24. A method according to Claim 19, further comprising a step of setting a number of sessions of the target application to be executed by the user prior to the communicating device communicating the log of the monitored data.

25. A system according to Claim 19, wherein the key data and the value data in the map both contain string data.

26. A system according to Claim 25, wherein the value data includes vectors which contain string data.

27. A method according to any one of Claims 19-26, wherein the communicating step communicates the log of the monitored data by Internet mail.

28. A computer program product comprising:
a computer storage medium and a computer program code mechanism embedded in the computer storage medium for causing a computer to monitor a user's usage of an interface of a target application, the interface comprising a plurality of operations to be selected by a user, comprising:

a first computer code device configured to monitor data of selecting of the plurality of operations of the interface by the user, and configured to generate a log of the monitored data, the log of the monitored data being in a form of a map mapping key data to respective value data; and

a second computer code device configured to receive an object derived from the abstract class including the log of the monitored data, and to communicate the log of the monitored data.

29. A computer program product according to Claim 28, wherein the target application is a software application and the interface is a display screen of the software application.

30. A computer program product according to Claim 28, wherein the target application is an image forming device and the interface is an operation panel of the image forming device.

5 31. A computer program product according to Claim 28, wherein the target application is an appliance and the interface is an operation panel of the appliance.

10 32. A computer program product according to Claim 28, wherein the second computer code device is further configured to send the log of the monitored data when the user exits the target application.

15 33. A computer program product according to Claim 28, further comprising a third computer code device configured to set a number of sessions of the target application to be executed by the user prior to the second computer code device communicating the log of the monitored data.

34. A computer program product according to Claim 28, wherein the key data and the value data in the map both contain string data.

20 35. A system according to Claim 34, wherein the value data includes vectors which contain string data.

25 36. A computer program product according to any one of Claims 28-35, wherein the second computer code device is further configured to communicate the log of the monitored data by Internet mail.